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2014 Project Scoping Former Lyondell Beaver Valley Site

Lyondell Environmental Custodial Trust

December 9, 2013





Lyondell Environmental Custodial Trust

- **Lyondell filed for bankruptcy January 6, 2009**
- **Trust inception: March 30, 2010**
- **7 sites; 6 active (CA, IL, MD, MI, NC, PA, TX)**
- **Le Petomane, Inc: 5 active Trusts; 50+ sites**

- **Trust Objectives**
 - **Remediate**
 - **Sell**



Trust Objectives - Today

- **Confirm current site regulatory status**
- **Understanding PADEP's objectives**
- **Definition of roles: PADEP / EPA**
- **Agreement on 2014 Scope of Work**
- **Discussion regarding the potential sale of the Site**
- **Establish communication protocols**



Agenda

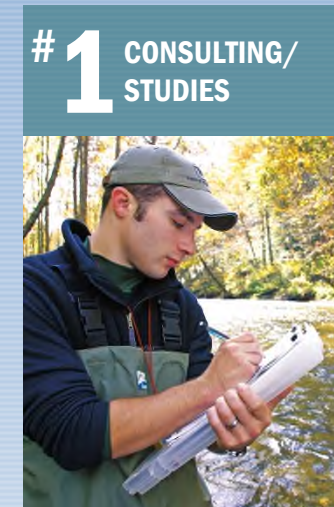
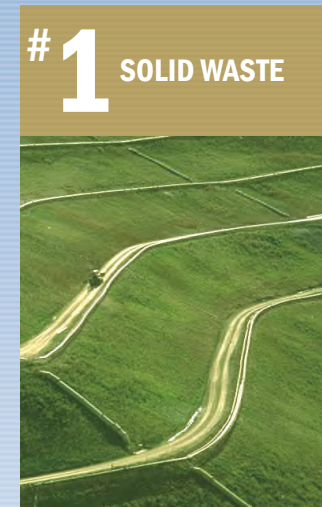
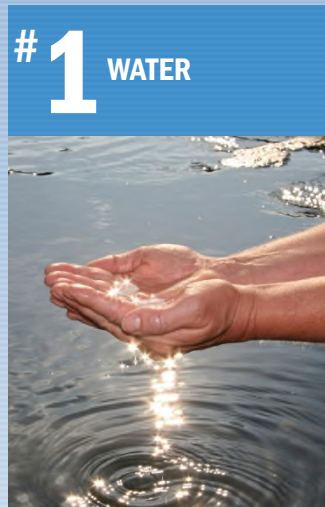
- **Trust Introduction**
- **Introduction to Tetra Tech & Project Team**
- **Overview History of Site**
- **Regulatory Summary**
- **Trust Activity and Financial Status**
- **2014 Scope of Work**
- **Sale of the Site**
- **Recap**
- **Q&A**



Introduction of Tetra Tech

- **Tetra Tech provides full service environmental, water, and infrastructure services**
- **350 Offices and 14,000 employees**
- **Pittsburgh Office (Greentree & Monroeville)**
 - **Over 215 environmental professionals**
 - **Turnkey environmental, civil and water management services**
 - **Experience with PADEP ACT 2, RCRA, NPDES**
- **Project Team**
 - **Derek Amidon – Project Principle**
 - **Keith Henn – Project Manager**
 - **Greg Farrell – Sr. Technical Lead**

Tetra Tech ENR Rankings



ENVIRONMENTAL RANKINGS

4 Top 200 Environmental Firms

1 Water Treatment/Supply

2 Environmental Science

3 Environmental Firms in International Markets

4 Hazardous Waste

6 Engineering/Design

DESIGN RANKINGS

8 Top 500 Design Firms

2 Treatment/Desalination

4 Sewer & Waste

7 Industrial Process

9 General Building

13 Global Design Firms

Overview of Site History

- **1942 - US Government commissions Koppers Company to construct facility to produce styrene and butadiene as feedstock for offsite rubber production**
- **1981 - Plant becomes part of ARCO Chemical Company**
- **1997 - NOVA Chemicals purchases plant from ARCO and active operations continue**
 - **Central Plant/Styrene II and Over-the-Hill Tank Farm Areas assets/ownership transferred to NOVA**
 - **ARCO retains ownership of the East Landfill, West Landfill, Phthalic Anhydride, and Raccoon Creek Areas**



Overview of Site History – cont.

- **1998 - Lyondell Chemical Company purchases ARCO Chemical Company**
- **2009 – Lyondell declares bankruptcy**
- **2010 – Lyondell Environmental Custodial Trust formed with PADEP (Lead) & EPA (Non-Lead) as beneficiaries**

Trust Transferred Properties (outlined in red)



Regulatory History

- **1994 Consent Order and Agreement (COA) entered into between ARCO and PADEP**
 - 1994 COA maintained that during plant operations chemicals were either spilled or leaked on-site
 - Required Site Investigations to be completed
- **Six areas of environmental concern established, four of which are currently owned by the Trust**
 1. East Landfill
 2. Raccoon Creek Area
 3. West Landfill/Dravo Quarry Area
 4. Phthalic Anhydride Area

 5. Central Plant/Styrene II
 6. Over-the-Hill Tank Farm

Property and
environmental liability
not owned by Trust

Regulatory History – Cont.

- **1997 Second COA entered into between ARCO and PADEP**
 - Notice of Intent to Remediate under ACT 2 submitted
 - 1997 COA established the remedial actions for each site
- **1998/99: Relief of Liability for the 4 Trust-owned areas of environmental concern finalized under Act 2**
- **2003 – RCRA Environmental Indicator Inspection Report Completed by DEP/USEPA**
- **2007 – NOV issued by PADEP to Lyondell for areas devoid of significant vegetation**
- **2011 - NOV issued by PADEP to Trust for not submitting a NPDES renewal app, and therefore discharging without a permit**

Key Documents

➤ Act 2

1. East Landfill - Final Rpt (1998), Relief of Liability (ROL) (1999)
2. Raccoon Creek Area - Final Rpt (1998), ROL (1999)
3. West Landfill/Dravo Quarry Area - Final Rpt (1999), ROL (1999)
4. Phthalic Anhydride Area - Final Rpt (1997), ROL (1998)

➤ RCRA

1. DEP Environmental Indicator Determination Report (2003)
2. EPA letter to Lyondell in response to DEP EI Det. Rpt (2004) - draft

➤ NOV

1. 2007 DEP NOV – Areas Devoid of Vegetation
2. 2011 DEP NOV – NPDES Permit

Act 2 Regulatory Summary – East Landfill

- Approximately 54 acres
- Used until 1986 for occasional disposal of waste polystyrene and polystyrene beads, cleaning solutions, and sludge generated during polystyrene production
- Final Report (1998)
- Relief of Liability (ROL) under Non-Residential Statewide Health Standard (NR SHS) and Site Specific Standard (SSS) approved by PADEP in 1999



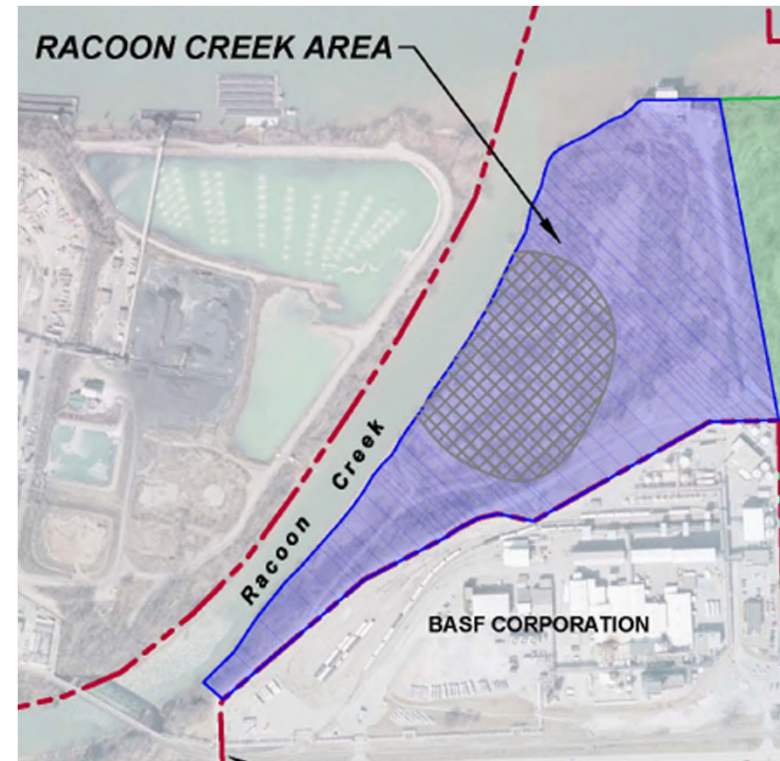
Act 2 Regulatory Summary – East Landfill

- **Post Remedial Care Plan (PCP) Included:**
 - 1) Visual Inspection for 5 years to ensure landfill cap integrity**
 - 2) Soil Management Plan for future construction activities**
 - 3) Deed Notice to describe environmental conditions**
 - 4) Well Abandonment, except for EL-6, EL-7, and EL-8, which are to stay for future potential sampling**
 - 5) No post remediation sampling required.**

- **PCP is complete (2003) w/the exception of the following:**
 - **Complete Environmental Covenants**

Act 2 Regulatory Summary – Raccoon Creek Area

- Approximately 18 acres
- Used 1943 - 1975 for disposal of various plant wastes
- Final Report (1998)
- ROL under NR SHS and SSS approved by PADEP in 1999



Act 2 Regulatory Summary – Raccoon Creek Area

➤ PCP Included:

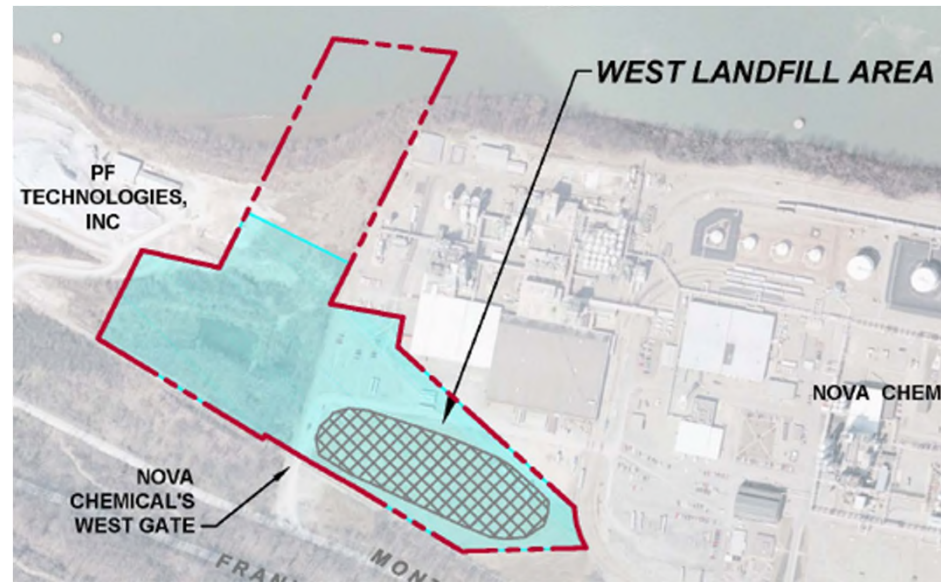
- 1) Visual Inspection for 5 years to ensure landfill cap integrity
- 2) Soil Management Plan for future construction activities
- 3) Deed Notice to describe environmental conditions
- 4) Well Abandonment, except for MW-120, MW-159, MW-161, MW-162S, MW-163S, MW-164, MW-501S, MW-501D, and MW-502, which are to stay for future potential sampling.
- 5) Raccoon Creek will be sampled along Transect E for 8 additional quarters for BTEX
- 6) No post remediation sampling required

➤ PCP is complete (2003) w/the exception of the following:

- Complete Environmental Covenants

Act 2 Regulatory Summary – West Landfill/Dravo Quarry Area

- Approximately 14 acres
- Used 1943 to 1972 for disposal of plant process waste
- Final Report (1999)
- ROL under NR SHS and SSS approved by PADEP in 1999



Act 2 Regulatory Summary – West Landfill/Dravo Quarry Area

➤ PCP Included:

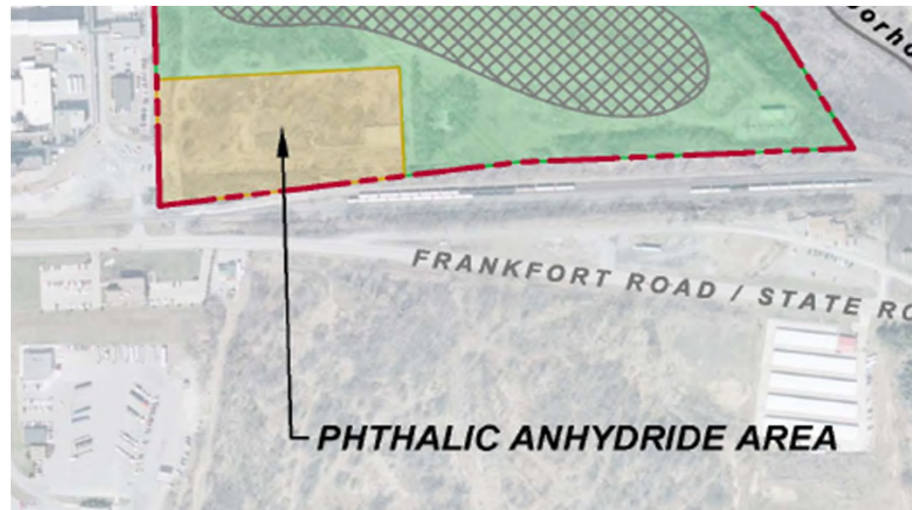
- 1) Visual Inspection for 5 years to ensure landfill cap integrity
- 2) Soil Management Plan for future construction activities
- 3) Deed Notice to describe environmental conditions
- 4) Use portion of West Landfill as truck turnaround
- 5) Well Abandonment, except for MW-47, MW-48, MW-49, MW-50A, and MW-50B, which are to stay for future potential sampling
- 6) No post remediation sampling required

➤ PCP is complete (2003) w/the exception of the following:

- Complete Environmental Covenants

Act 2 Regulatory Summary – Phthalic Anhydride Area

- Approximately 4 acres
- From plant start-up until 1962 area used for the production of phthalic anhydride & naphthalene
- Final Report (1997)
- Revisions (1998)
- Act 2
 - ROL under NR SHS and SSS PADEP in 1998
 - No PCP required
- Environmental Covenants need to be completed



Regulatory Status

- **2003 RCRA Environmental Indicator Determination Report (DEP/USEPA)**
 - EI Report received Sept 2, 2003 (sent from DEP to EPA)
 - Lyondell discussed the case with EPA 2003:
 - EI's have been met using data collected under Act 2
 - No additional characterization is required
 - EPA drafted a letter in response about EI status (2004)
 - We have no record of the letter being finalized
 - "EPA has concluded that current Human Health Exposures are under control and that groundwater migration is incomplete pending further discussion"
 - What is the current regulatory status of EI?

- **2007 DEP NOV – Sparse Vegetation**
 - Addressed by CH2M Hill (2008) stating that area of sparse vegetation was outside of landfill
 - What was the regulatory basis for this inspection?
 - What is the current regulatory status of this NOV?

Regulatory Status –Cont.

➤ 2011 DEP NOV

- New NPDES Permit obtained in 2013
- Outfalls #023 & #024
 - Drainage from source areas questioned (2007, 2013)
 - Outfall #023 historically dry (inspections in 2007 - 2013)
- Does sampling need to be continued?
 - Page 11 (Part B.b) of permit allows for annual inspections in lieu of sampling



Trust Activity: Inception – October 2013

- **Comprehensive Site Compliance Evaluation Report submitted (ENVIRON; May 2013)**
- **NPDES**
 - **NPDES Permit reissued (February 2013)**
 - **Discharge Monitoring Report (DMR) submitted September 10, 2013.**
 - Covered reporting period from 2-22-13 thru 8-22-13
 - No samples collected (lack of discharge during site visit)

Trust Financials

- **Initial Funding** **\$2,000,000.00**
- **Remaining** **\$1,905,200.34** (95%)
- **Tax Account** **\$2,593,130.29** (~38 years)

- **2013 Budget**
 - **Total Environmental** **\$57,446.00**
 - **Utilized** (through Sept) **\$33,686.61** (59%)
 - **Total Administrative** **\$80,000.00**
 - **Utilized** (through Sept) **\$27,329.58** (34%)



Proposed 2014 Scope of Work

➤ Administrative

- Resolution of various property and access questions
- Matters related to the potential sale of the site
- Document management
- General administrative tasks

Proposed 2014 Scope of Work

➤ Environmental

- Preparation of HASP
- Record Environmental Covenants; Act 2
- Verification that EI's have been met
- Engage DEP Water Mgmt Group regarding NPDES
- Management of monitoring wells
- Resolution of NOVA well issues
- Erosion *monitoring* along Poorhouse Run
- Minimal Cap Maintenance
- Maintain/repair/replace site fencing and signage

Site Sale

- **Caserta, LLC** (Castlebrook Development Group)
 - Purchase agreement dated **October 3, 2012**
 - **\$825,000** (First offer, Site not appraised)

- **Shell**
 - **May 10, 2013 meeting**
 - **Only wanted a lease; Disengaged.**



Next Steps

- Request a Letter from DEP documenting compliance with Act 2
- Status of EI Determination Report
- Agreement on 2014 Scope of Work
- Approval of 2014 Budget
- Establish communication protocols



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Thank You
And Questions?



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